What is claimed is:

1. A method for obtaining a substantially pure population of hematopoietic stem cells, comprising:

(a) contacting a biological sample comprising cells with an affinity agent which binds to endothelial protein C receptor (EPCR) under conditions appropriate for binding to occur; and

(b) separating cells that bind to the affinity agent from cells that do not bind to the affinity agent, thereby producing a substantially pure population of hematopoietic stem cells.

2. The method of claim 1, wherein the affinity agent is an antibody or fragment thereof.

3. The method of claim 1 or 2, wherein the step of separating cells is performed by a method selected from the group consisting of: column chromatography, fluorescence-activated cell sorting, magnetic bead separation and direct immune adherence.

4. The method of any one of claims 1-3, wherein the biological sample comprising cells is selected from the group consisting of: bone marrow cells, embryonic yolk sac, fetal liver, fetal and adult spleen and blood.

5. A substantially pure population of hematopoietic stem cells isolated by a method of any one of claims 1-4.

6. A method for obtaining a substantially pure population of EPCR+ cells, comprising:

(a) contacting a biological sample comprising cells with an affinity agent which binds to the endothelial protein C receptor (EPCR) under conditions appropriate for binding to occur; and

(b) separating cells that bind to the affinity agent from cells that do not bind to the affinity agent, thereby producing substantially pure population of EPCR+ cells.

7. The method of claim 6, wherein the affinity agent is an antibody or fragment thereof.

8. The method of claim 6 or 7, wherein the step of separating cells is performed by a method selected from the group consisting of: column chromatography, fluorescence-activated cell sorting, magnetic bead separation and direct immune adherence.

9. The method of any one of claims 6-8, wherein the biological sample comprising cells is selected from the group consisting of: bone marrow cells, embryonic yolk sac, fetal liver, fetal and adult spleen and blood.

10. The method of claim 9, wherein the EPCR+ cells are human EPCR+ cells.

11. The method of claim 9, wherein the EPCR+ cells are murine EPCR+ cells.

12. A substantially pure population of hematopoietic stem cells consisting essentially of EPCR+ cells.

13. A method for treating a subject using hematopoietic stem cell transplantation, comprising: implanting into the subject the substantially pure population of human hematopoietic stem cells of claim 5 or 12.